

Application No. 08/354,450
Amendment dated January 7, 2004
Reply to Office Action of July 7, 2003

REMARKS

Applicant cancelled claims 19-24 and 26-28 and added new claims 29-300 to further define Applicant's claimed invention. Applicant amended the specification to correct several minor informalities. No new matter has been added.

In the Office Action, the Examiner objected to the amendment filed on July 23, 2002 under 35 U.S.C. § 132 as introducing new matter and objected to the specification under 35 U.S.C. § 112, first paragraph for failing to provide an adequate written description. In particular, the Examiner contends that the phrase "each of said flexible projections having a height measured from a surface of said shaft, the sum of the height of one of said flexible projections and the radius of said shaft being greater than the radius of said flexible member" is not supported. Applicant assumes that the Examiner's objections relate to the Amendment After Final filed July 23, 2002 which amended claim 19 to add the phrase objected to by the Examiner. Applicant respectfully traverses the Examiner's objections for reasons stated in the Appeal Brief filed July 23, 2002 and the Reply Brief filed April 24, 2003, the remarks of which are incorporated by reference herein. Nonetheless, in order to expedite the prosecution of the present application, Applicant cancelled claims 19-24 and 26-28, thus rendering the Examiner's objections moot.

The Examiner rejected claims 19-24 and 26-28 under 35 U.S.C. § 112, first paragraph as containing subject matter which was not adequately described as set forth in the objection to the specification under 35 U.S.C. § 112, first paragraph above; rejected claims 19, 22 and 26-28 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,261,914 to Warren; and rejected claims 20 and 21 under 35 U.S.C. § 103(a) as being unpatentable over Warren in view of U.S. Patent No. 4,976,715 to Bays et al. Applicant respectfully traverses the Examiner's rejections for the reasons stated in the Appeal Brief filed July 23, 2002 and the Reply Brief filed April 24, 2003. In particular, Applicant submits that a *prima facie* case of obviousness was not established because Warren teaches away from the subject matter of former independent claims 19 and 28, and the Examiner used impermissible hindsight to fashion a motivation to

Application No. 08/354,450
Amendment dated January 7, 2004
Reply to Office Action of July 7, 2003

support the rejections. Nonetheless, Applicant submits that the rejections are rendered moot at least in view of the cancellation of claims 19-24 and 26-28.

Applicant submits that new independent claims 29, 60, 100, 144, 176, 211, 242, 273, 283, and 293 are patentable over Warren. In particular, independent claim 29 recites a tissue rivet having a flexible member at the trailing end the flexible member "being at least in part curved when said flexible member is in contact with the tissue." Warren does not disclose a tissue rivet as recited in claim 29.

Independent claim 60 recites a tissue rivet having a flexible member at the trailing end, the top of the flexible member "being at least in part concave when said flexible member is in contact with the tissue." Warren does not disclose a tissue rivet as recited in claim 60.

Independent claim 100 recites a tissue rivet having a flexible member proximate the trailing end, the flexible member "being at least in part curved when said bottom of said flexible member contacts the tissue." Warren does not disclose a tissue rivet as recited in claim 100.

Independent claim 144 recites a tissue rivet having a flexible member proximate the trailing end, the flexible member having a bottom, "at least a portion of said bottom forming an included angle relative to the mid-longitudinal axis of said shaft that is greater than 90 degrees." Warren does not disclose a tissue rivet as recited in claim 144.

Independent claim 176 recites a tissue rivet having a flexible member proximate the trailing end, the flexible member having an outer perimeter, "at least a portion of said outer perimeter being flexible relative to said shaft when said rivet is inserted into the tissue." Warren does not disclose a tissue rivet as recited in claim 176.

Independent claim 211 recites a tissue rivet having a member proximate the trailing end, the member having a bottom, "at least a first portion of said bottom adjacent to said outer perimeter being at an acute angle relative to the mid-longitudinal axis of said shaft, at least a second portion of said bottom adjacent to said outer perimeter being at an obtuse angle relative to the mid-longitudinal axis of said shaft." Warren does not disclose a tissue rivet as recited in claim 211.

Application No. 08/354,450
Amendment dated January 7, 2004
Reply to Office Action of July 7, 2003

Independent claim 242 recites a tissue rivet having a member proximate the trailing end, the member having a bottom, "at least a portion of said member being moveable relative to said shaft between an undeployed position where said bottom surface is not in contact with the tissue and a deployed position where said bottom surface contacts the tissue, said member having a first shape in the deployed position and a second shape in the undeployed position, the first shape being different from the second shape." Warren does not disclose a tissue rivet as recited in claim 242.

Independent claim 273 recites a method for holding pieces of tissue together, including the step of providing the rivet having a member proximate the trailing end of the shaft, the member having a bottom, "at least a portion of the member being moveable relative to the shaft between an undeployed position where the bottom surface is not in contact with the tissue and a deployed position where the bottom surface contacts the tissue, the member having a first shape in the deployed position and a second shape in the undeployed position, the first shape being different from the second shape." Warren does not disclose a method as recited in claim 273.

Independent claim 283 recites a method for holding pieces of tissue together, including the step of inserting a rivet having a flexible member into the tissue "until the bottom of the flexible member contacts the tissue and the flexible member deforms to conform to the curvature of the tissue adjacent the rivet." Warren does not disclose a method as recited in claim 283.

Independent claim 293 recites a method for holding pieces of tissue together, including the step of inserting a rivet having a member proximate the trailing end of the shaft into the tissue "until the bottom of the member contacts the tissue, at least a first portion of the bottom adjacent to the outer perimeter of the member being at an acute angle relative to the mid-longitudinal axis of the shaft, at least a second portion of the bottom adjacent to the outer perimeter of the member being at an obtuse angle relative to the mid-longitudinal axis of the shaft." Warren does not disclose a method as recited in claim 293.

Applicant also submits that dependent claims 30-59, 61-99, 101-143, 145-175, 177-210, 212-241, 243-272, 274-282, 284-292, and 294-300 are allowable at least

Application No. 08/354,450
Amendment dated January 7, 2004
Reply to Office Action of July 7, 2003

because they depend from an allowable independent claim, or claims dependent therefrom.

In view of the foregoing amendments and remarks, it is respectfully submitted that the claims, as amended, are patentable. Therefore, it is requested that the Examiner reconsider the outstanding rejections in view of the preceding comments. Issuance of a timely Notice of Allowance of the claims is earnestly solicited.

To the extent any extension of time under 37 C.F.R. § 1.136 is required to obtain entry of this reply, such extension is hereby respectfully requested. If there are any fees due under 37 C.F.R. §§ 1.16 or 1.17 which are not enclosed herewith, including any fees required for an extension of time under 37 C.F.R. § 1.136, please charge such fees to our Deposit Account No. 50-1066.

Respectfully submitted,
MARTIN & FERRARO, LLP

Dated: January 7, 2004

By: Thomas H. Martin
Thomas H. Martin
Registration No. 34,383

1557 Lake O'Pines Street, NE
Hartville, Ohio 44632
Telephone: (330) 877-0700
Facsimile: (330) 877-2030